

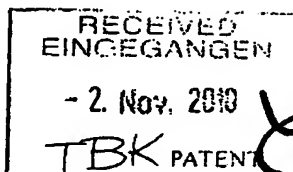


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Date
19-10-2010

Reference ep45220	Application No./Patent No. 03780953.0 - 1218 / 1574558
Applicant/Proprietor TOYODA GOSEI CO., LTD., et al	

Summons to attend oral proceedings pursuant to Rule 115(1) EPC

You are hereby summoned to attend oral proceedings arranged in connection with the above-mentioned European patent application.

The matters to be discussed are set out in the communication accompanying this summons (EPO Form 2906).

The oral proceedings, which will not be public, will take place before the Examining Division.

WV 15.2.11 ✓
WV 19.11.10 ✓

on 17.02.11 at 09.00 hrs, EPO Rijswijk, Le Croisé
Verrijn Stuartlaan 2A, NL-2288 EE Rijswijk (ZH)

No changes to the date of the oral proceedings can be made, except on serious grounds (see OJ EPO 1/2009, 68). If you do not appear as summoned, the oral proceedings may continue without you (R. 115(2) EPC, see also OJ EPO 10/2008, 471).

Your attention is drawn to Rule 4 EPC, regarding the language of the oral proceedings, and to the Special edition No. 3 OJ EPO 2007, L1., concerning the filing of authorisations for company employees and lawyers acting as representatives before the EPO.

WV 7.1.11 ✓

The final date for making written submissions and/or amendments (R. 116 EPC) is 17.01.11. ✓

The actual room number will be given to you by the porter in the foyer at the above EPO address. Room C05D07 is available as waiting room.

1st Examiner:
Ziegler J

2nd Examiner:
Mehdaoui I

Chairman:
Lehnert A

For the Examining Division



Muñoz-Manneken, Toñi

Annexes:
Confirmation of receipt (Form 2936)
Communication (EPO Form 2906)

Registered letter with advice of delivery
EPO Form 2008 04.09 [ORAL03=D000] (14/10/10)

to EPO postal service: 14.10.10

1 Oral Proceedings

1.1 Oral proceedings are convened at the applicant's request, because the arguments received with letter of 26-03-2010 are not convincing. Based on the present state of the file, rejection of the application is to be expected according to Article 97(1) EPC. The Examining Division intends to arrive at a decision at the end of the Oral Proceedings (Rule 68(1) EPC) without granting further extension of time to file additional arguments or evidence.

1.2 The attention of the applicant is drawn to the notice from the European Office concerning non-attendance at oral proceedings before the examining division published in OJ 10/2008. If an applicant does not appear as summoned, the oral proceedings may be conducted without him (R. 115(2) EPC, GL E-III, 8.3). An applicant has to expect that any objections relating to filed amendments and submissions will be dealt with at the oral proceedings. Oral proceedings give the applicant an opportunity to give his comments in accordance with Art. 113(1) EPC. If the applicant decides not to attend the oral proceedings, he chooses not to make use of this opportunity to comment at the oral proceedings on any objections, but relies on the arguments as set out in the written submissions. The applicant has thus to expect that a decision based on objections arising against the amended claims during oral proceedings will be taken in his absence.

2 The preliminary opinion of the Examining Division is as follows:

2.1 Amendments:

2.1.1 As far as the new claims could be understood (see below mentioned lack of clarity), the following amendments filed with the letter dated 26-03-2010 introduce subject matter which extends beyond the content of the application as originally filed, contrary to Article 123(2) EPC:

2.1.2 Claim 1 : There is no basis for the amendment "Ge is comprised", because Table 7, example 4 only comprises optional Ge. And the specific formulas of examples 9-13 do not allow the generalisation that Ge must be present in all claimed phosphors.

2.1.3 Claim 1 : There is no basis for replacing "about 10000 K", with "9700 K" or "about 3000 K" with "2700 K", because each of the figures 6-12 shows a phosphor of an unknown composition. It is not plausible that all phosphors show the same emission spectrum. Hence, it is not obvious, that e.g. the phosphor in figure 6 is a phosphor that must comprise Ge and the figure can thus not be the basis for the above amendment.

2.1.4 Claims 2 and 3: There is no basis for introducing "An LED comprising", as neither description nor figures disclose LEDs using a phosphor according to present claim 1.

2.2 Although an objection on Article 123(2) EPC has been raised, for the sake of prosecution, the following is to be considered for the present set of claims:

2.3 Inventive step

2.3.1 Claim 1:

The document D10 discloses (claim 17) a long-lasting phosphor activated by divalent europium and having the chemical composition



where R is selected from Ba, Sr, Ca, Mg, Zn

and M is at least one auxiliary activator selected from e.g. Mn.

$0.3 \leq a \leq 8$,

$0.001 \leq b \leq 2$,

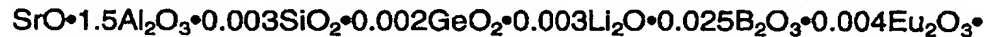
$0.001 \leq c \leq 0.3$,

$0.001 \leq d \leq 0.3$,

$0 \leq x < 1.0$, and

$0 \leq y \leq 1.0$.

Specifically disclosed are only phosphors which use M = Dy such as



$0.004Dy_2O_3$ (page 13, example 45) and

$SrO \cdot Al_2O_3 \cdot 0.04GeO_2 \cdot 0.020B_2O_3 \cdot 0.010Eu_2O_3 \cdot 0.010Dy_2O_3$ (page 13, example 46).

2.3.2 Insofar the subject-matter of present claim 1 can be understood (see below mentioned lack of clarity) it differs from this known phosphor in that the co-activator must be manganese.

2.3.3 The technical effect of this difference is not known.

Remark concerning the technical effect: so far no technical effect has been provided for the use of Mn over Dy in D10's phosphor.

2.3.4 The problem to be solved by the present invention may therefore be regarded as how to provide an alternative phosphor.

2.3.5 The solution proposed in claim 1 does not involve an inventive step (Articles 52(1) and 56 EPC), the reasoning being as follows:

- 2.3.5.1 The skilled person, starting from **D10** (claim 17; examples 45 and 46) and trying to find an alternative phosphor, would follow the hint in **D10** and try to find phosphors with the other listed co-activators such as manganese (claim 17), thus arriving at the subject matter of present claim 1 without the need of inventive skills. Hence, present claim 1 is an obvious alternative and not inventive.
- 2.3.5.2 The subject-matter of claim 1 consists in the selection of a composition from the range of phosphors described in document **D10**. Such a selection can only be regarded as inventive if the composition presents unexpected effects or properties in relation to the rest of the range. However, no such effects or properties are indicated in the application. Hence, no inventive step is present in the subject-matter of claim 1 (Articles 52(1) and 56 EPC).
- 2.4 **Clarity**
- 2.4.1 The application does not meet the requirements of Article 84 EPC, because claim 1 is not clear.
- 2.4.2 Claim 1 states, that "light, emitted from a manganese (II) ion, is sensitized with a primary activator". It is not clear if the phosphor is supposed to be sensitized by the Mn^{2+} ion or the light (which is technically not plausible).
- 2.4.3 The following part of claim 1 is incomprehensible: " A phosphor" ... " characterized in that a europium-manganese double activated phosphor is contained and that light, emitted from a manganese(II) ion, is sensitized with a primary activator in which the emission band overlaps with at least one characteristic excitation band of manganese(II) and emission of light from Eu is produced in a blue to green spectrum region, and said phosphor comprises a borate-silicate-phosphor".